

Greenville County Manufacturing Industry Analysis



South Carolina
Department of
Commerce



August 2008

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INTRODUCTION

The South Carolina Department of Commerce Research Division appreciates the opportunity to assist Greenville County decision makers with additional information as follow-up to the Base Labor Market Analysis.

The manufacturing sector was one of five sectors selected for additional study (see “Methodology” below for the definition of manufacturing used in this analysis). In Greenville County, that sector provided 25,829 jobs in 2007, or approximately 11 percent of Greenville County’s 237,000 jobs.

This report provides the following information for the manufacturing sector:

- Primary occupations used in the sector
- Skills and education needed for those occupations
- Earnings for those occupations including those that pay a living wage
- Projected growth and/or turnover for those occupations
- Major employers in the sector

METHODOLOGY

These three-digit NAICS categories were used to define manufacturing for this analysis:

- food (311)
- textile mills (313)
- textile product mills (314)
- chemicals (325)
- plastics and rubber products (326)
- fabricated metal products (332)
- machinery (333)
- electrical equipment and appliances (335)
- transportation equipment (336)
- furniture and related products (337)

The analysis was limited to these industries, which make up 85 percent of Greenville County’s manufacturing jobs, so as to focus on Greenville’s primary manufacturing occupations. The manufacturing sector as defined here was used to develop employer lists, determine employment numbers in Greenville County, and to view occupational staffing patterns.

To estimate employment by occupation for manufacturing in Greenville County, statewide occupational staffing patterns for the sector as defined here were applied to Greenville County industry employment estimates (staffing patterns are not available for counties). Industry employment estimates came from the Bureau of Labor Statistics’ Quarterly Census of Employment and Wages. Staffing pattern data shows the percentage of jobs by occupation for an industry.

Occupational skills and education data were obtained from the national O*Net database. For the skills noted in this analysis, O*Net data ranking the level of the skill needed for each job was used. O*Net data is for occupations nationwide; it is not state or county specific.

For this analysis, the following skills were rated for each occupation:

- Reading Comprehension
- Writing
- Speaking
- Mathematics

To measure adequacy of wages, living wage models were explored. Several models were available utilizing reliable national data from sources such as the U.S. Census, U.S. Department of Commerce Bureau of Economic Analysis, U.S. Department of Labor Bureau of Labor Statistics, U.S. Department of Agriculture, U.S. Department of Housing and Urban Development, and the Children's Defense Fund.

The model utilized for this analysis was developed by Pennsylvania State University using the sources listed above. The model provided data up to 2004 by area. That data was adjusted for inflation using the 2008 Consumer Price Index for All Urban Consumers. Based on this data, a family consisting of one adult and one child would need an annual salary of \$31,477, or an hourly wage of \$15.13, as a living wage in Greenville County. The hourly wage was determined by dividing the annual salary by 2,080 hours.

To determine whether there were significant employment opportunities for the occupations examined, both growth prospects and turnover were identified.

Occupations with projected growth of 100 or more from 2006-2016 in Greenville County were categorized as high-growth jobs. The source for this data was Economic Modeling Specialists Inc (EMSI). Occupations for which 70 percent or more of their annual job openings were due to replacement needs (based on statewide data) were identified as high-turnover jobs. For all jobs in South Carolina, turnover accounts for 59 percent of annual openings. South Carolina Department of Commerce 2006-2016 projections data was the source for turnover.

PRIMARY OCCUPATIONS

For this analysis, the following characteristics were determined for occupations with 100 or more employees in Greenville County's manufacturing sector:

- 2007 employment,
- Median wage (for Greenville County),
- Skills and education typically needed to perform the job,
- The determination whether the occupation has a living wage for Greenville County, and
- Significant growth prospects and/or high turnover.

For the manufacturing sector, 67 occupations have 100 or more employees. Below are the 10 occupations with the highest employment in the sector in Greenville County. A list of all occupations with employment of at least 100 along with their characteristics can be found in the appendix.

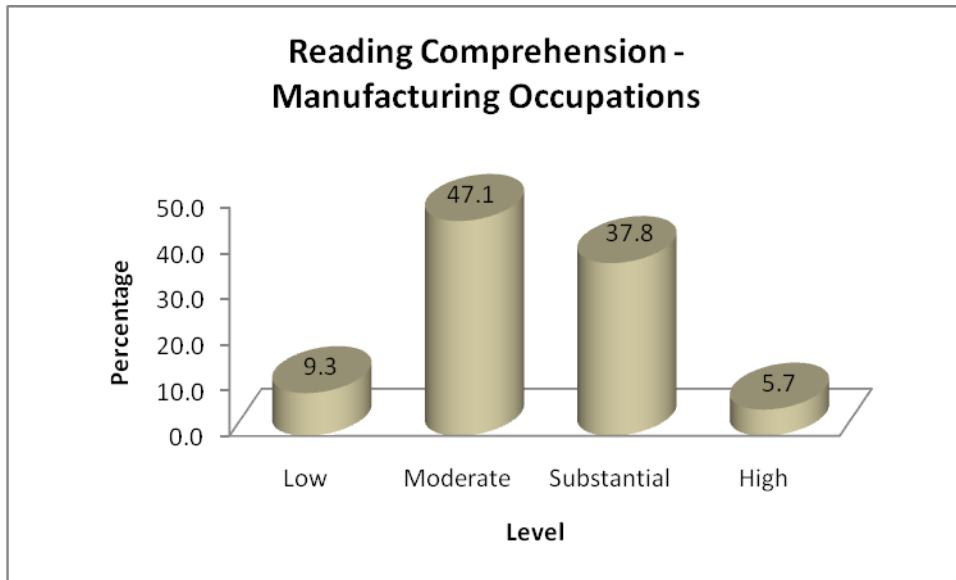
Occupation	Median Wage	Estimated Employment
Team Assemblers	\$13.55	2,611
Inspectors, Testers, Sorters, Samplers and Weighers	\$13.21	1,074
Supervisors/Managers of Production and Operating Workers	\$28.20	1,011
Textile Knitting and Weaving Machine Setters, Operators and Tenders	\$16.69	725
General Maintenance and Repair Workers	\$15.30	718
Laborers and Freight, Stock and Material Movers (hand)	\$10.90	663
Textile Winding, Twisting and Drawing Out Machine Setters, Operators and Tenders	\$11.05	633
Machinists	\$15.98	584
Helpers—Production Workers	\$9.34	510
Welders, Cutters, Solderers & Brazers	\$17.94	493

Source: EMSI, SC Department of Commerce.

SKILLS AND EDUCATION

Reading Comprehension

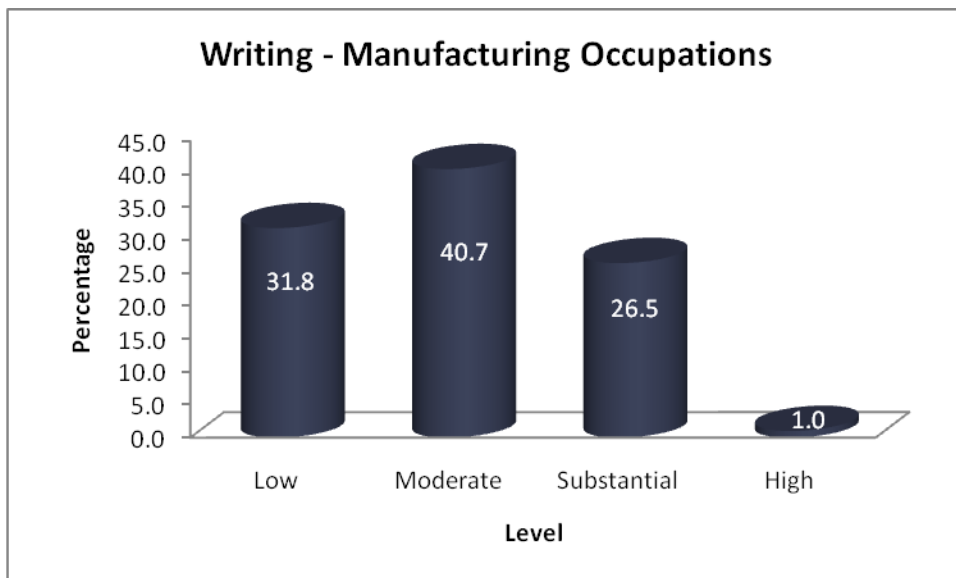
Of Greenville's manufacturing jobs, 85 percent require a moderate or substantial level of reading comprehension.



Source: SC Department of Commerce, US Department of Labor (O*Net).

Writing

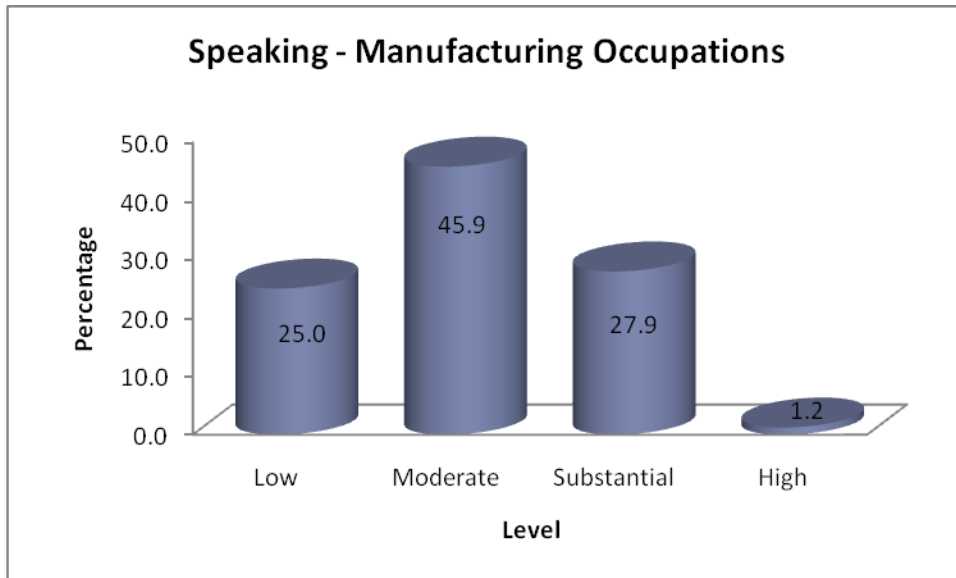
Over 70 percent of Greenville's manufacturing jobs require a low or moderate level of writing skills.



Source: SC Department of Commerce, US Department of Labor (O*Net).

Speaking

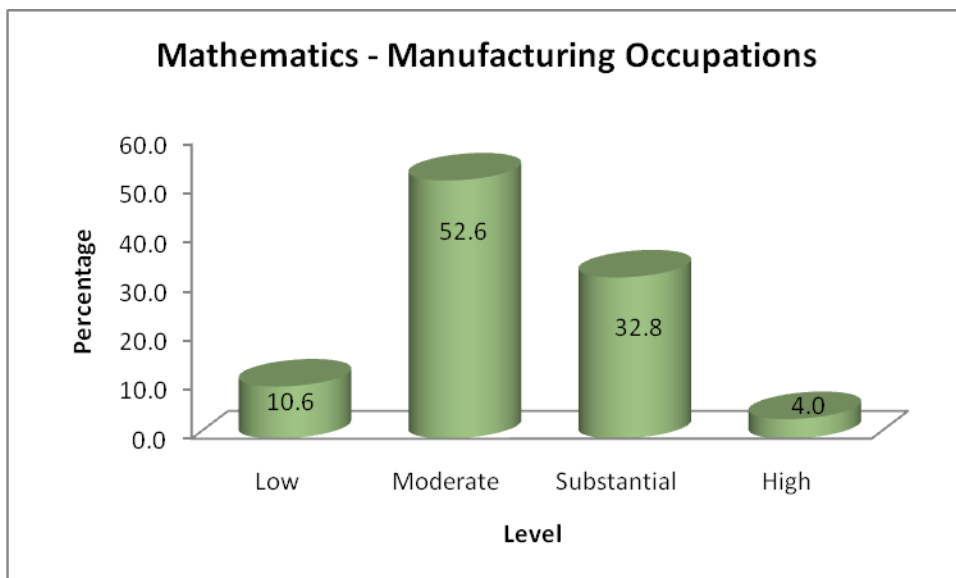
Almost three fourths of Greenville's manufacturing jobs require a moderate or substantial level of speaking ability.



Source: SC Department of Commerce, US Department of Labor (O*Net).

Mathematics

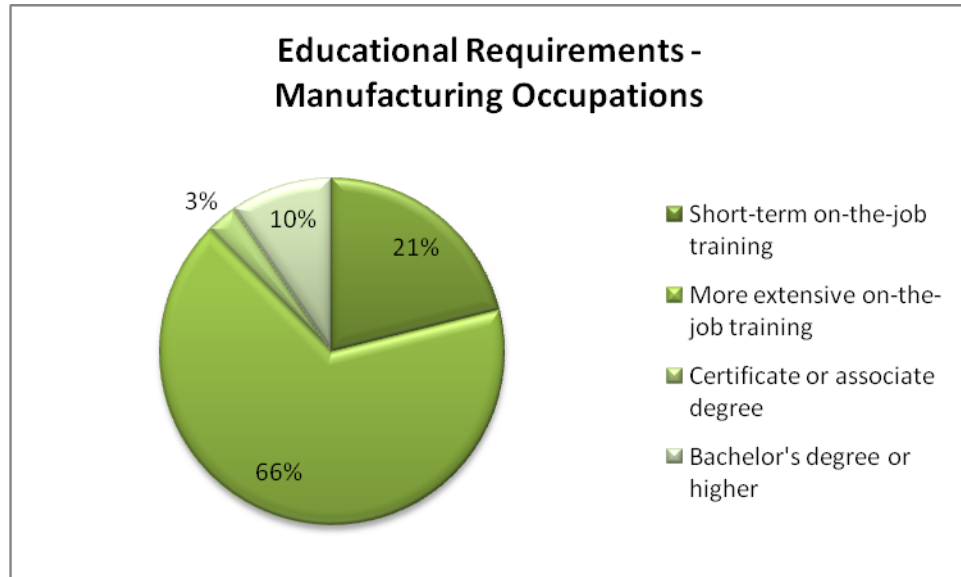
Of Greenville's manufacturing jobs, 85 percent of require a moderate or substantial level of math ability.



Source: SC Department of Commerce, US Department of Labor (O*Net).

Education

Two thirds of all jobs in Greenville's manufacturing sector require on-the-job training beyond the short-term level. However, 21 percent only require short-term training, giving a good number of people the opportunity to enter the industry.



Source: SC Department of Commerce, US Department of Labor (O*Net).

LIVING WAGE JOBS

Within the 67 profiled occupations, the following occupations meet or exceed the living wage described in “Methodology”.

Occupation	Median Wage
Engineering Managers	\$45.83
Fiberglass Laminators and Fabricators	\$42.56
Electrical Engineers	\$40.13
Industrial Production Managers	\$39.17
Engineering Technicians (except drafters)	\$38.39
Mechanical Engineers	\$36.87
General and Operations Managers	\$35.92
Industrial Engineers	\$31.99
Supervisors/Managers of Production and Operating Workers	\$28.20
Sales Representatives, Wholesale and Manufacturing (except technical and scientific products)	\$26.86
Chemical Plant and System Operators	\$25.67
Purchasing Agents (except wholesale, retail and farm products)	\$24.56
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	\$24.42
Supervisors/Managers of Mechanics, Installers and Repairers	\$24.11
Tool and Die Makers	\$23.72
Accountants and Auditors	\$22.33
Chemical Technicians	\$20.32
Supervisors/Managers of Office and Administrative Support Workers	\$20.14
Sewing Machine Operators	\$19.26
Industrial Engineering Technicians	\$19.12
Industrial Machinery Mechanics	\$18.92
Tire Builders	\$18.61
Chemical Equipment Operators and Tenders	\$18.59
Production, Planning and Expediting Clerks	\$18.33
Grinding, Lapping, Polishing and Buffing Machine Tool Setters, Operators and Tenders (metal and plastic)	\$18.32

Electricians	\$18.01
Machinery Maintenance Workers	\$17.95
Welders, Cutters, Solderers and Brazers	\$17.94
Computer-Controlled Machine Tool Operators (metal and plastic)	\$17.81
Executive Secretaries and Administrative Assistants	\$17.60
Lathe and Turning Machine Tool Setters, Operators and Tenders (metal and plastic)	\$17.38
Textile Knitting and Weaving Machine Setters, Operators and Tenders	\$16.69
Engine and Other Machine Assemblers	\$16.61
Coating, Painting and Spraying Machine Setters, Operators and Tenders	\$16.46
Sheet Metal Workers	\$16.09
Structural Metal Fabricators and Fitters	\$16.07
Machinists	\$15.98
Mixing and Blending Machine Setters, Operators and Tenders	\$15.62
Multiple Machine Tool Setters, Operators and Tenders (metal and plastic)	\$15.58
Bookkeeping, Accounting and Auditing Clerks	\$15.37
General Maintenance and Repair Workers	\$15.30
Drilling and Boring Machine Tool Setters, Operators and Tenders, (metal and plastic)	\$15.27

Source: EMSI.

OCCUPATIONS WITH SIGNIFICANT OPPORTUNITIES

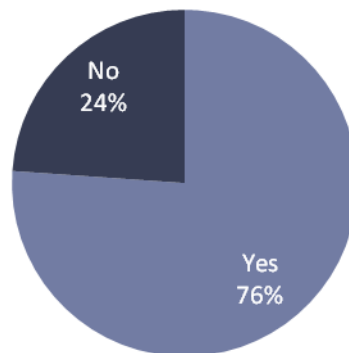
Specific jobs with high projected growth and/or high turnover are listed directly below. As the chart below demonstrates, 51 (76 percent) of the 67 profiled manufacturing occupations have high projected growth and/or high turnover. (Please see “Methodology” for an explanation of what constitutes high growth and turnover for this analysis)

- Team Assemblers
- Inspectors, Testers, Sorters, Samplers and Weighers
- Supervisors/Managers of Production and Operating Workers
- Textile Knitting and Weaving Machine Setters, Operators and Tenders
- General Maintenance and Repair Workers
- Laborers and Freight, Stock and Material Movers (hand)
- Textile Winding, Twisting and Drawing Out Machine Setters, Operators and Tenders
- Machinists
- Helpers--Production Workers
- Welders, Cutters, Solderers and Brazers
- Packaging and Filling Machine Operators and Tenders
- Industrial Machinery Mechanics
- Industrial Engineers
- Industrial Truck and Tractor Operators
- Sewing Machine Operators
- Cutting, Punching and Press Machine Setters, Operators and Tenders (metal and plastic)
- Packers and Packagers (hand)
- Molding, Coremaking and Casting Machine Setters, Operators and Tenders (metal and plastic)
- Shipping, Receiving and Traffic Clerks
- Mixing and Blending Machine Setters, Operators and Tenders
- Textile Bleaching and Dyeing Machine Operators and Tenders
- Sales Representatives, Wholesale and Manufacturing (except technical and scientific products)
- Extruding and Drawing Machine Setters, Operators and Tenders (metal and plastic)
- Computer-Controlled Machine Tool Operators (metal and plastic)
- Assemblers and Fabricators
- Mechanical Engineers
- Electrical and Electronic Equipment Assemblers
- Machine Feeders and Offbearers
- General Office Clerks
- Production, Planning and Expediting Clerks
- Tire Builders
- Extruding, Forming, Pressing and Compacting Machine Setters, Operators and Tenders
- Chemical Plant and System Operators
- Cutting and Slicing Machine Setters, Operators and Tenders

- Chemical Equipment Operators and Tenders
- Stock Clerks and Order Fillers
- Executive Secretaries and Administrative Assistants
- Coating, Painting and Spraying Machine Setters, Operators and Tenders
- Bookkeeping, Accounting and Auditing Clerks
- Tool and Die Makers
- Welding, Soldering and Brazing Machine Setters, Operators and Tenders
- Machinery Maintenance Workers
- Customer Service Representatives
- Drilling and Boring Machine

- Tool Setters, Operators and Tenders (metal and plastic)
- Electricians
- Sheet Metal Workers
- Janitors and Cleaners (except maids and housekeeping cleaners)
- Lathe and Turning Machine Tool Setters, Operators and Tenders (metal and plastic)
- Engineering Technicians (except drafters)
- Supervisors/Managers of Office and Administrative Support Workers
- Secretaries (except legal, medical and executive)

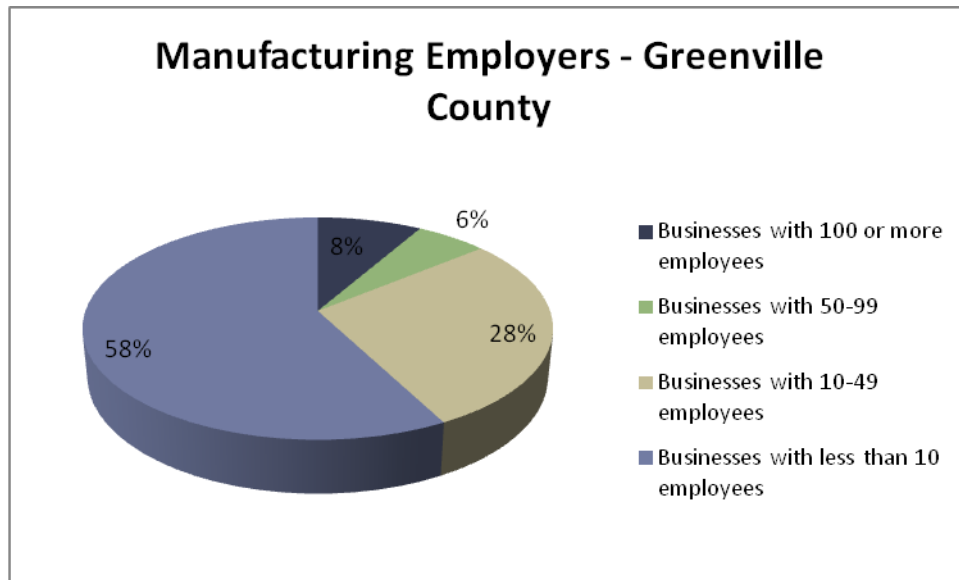
High Growth and/or Turnover? Profiled Manufacturing Occupations



Sources: EMSI, SC Department of Commerce.

EMPLOYERS

The Research Division utilized two national business databases, Dun & Bradstreet and InfoUSA, to come up with a list of manufacturing employers in Greenville County. These two sources showed 1,015 manufacturing businesses in Greenville County, employing from 1 to 4,000 people. About 8 percent of, or 83, manufacturing companies employed 100 or more people. The chart below breaks down the manufacturing employers by size in Greenville County.



Source: Dun & Bradstreet and infoUSA.

The list below gives detailed information for the 83 manufacturing businesses with 100 or more employees.

Greenville County Manufacturing Firms with 100 or More Employees

Company Name	City	Business Description	Employees
BMW Manufacturing Co	Greer	Automobiles	4,000
General Electric Co	Greenville	Mechanical Drive Gas Turbines and Electrical Equipment & Supplies	2,800
Lockheed Martin Aircraft Ctr	Greenville	Aircraft	1,200
Michelin North America Inc	Greenville	Automobile Tires	1,200
Comp X Security Products Inc	Greenville	Locks	700
Dispoz-O Products Inc	Fountain Inn	Plastics	700
Faurecia Interior Systems	Fountain Inn	Automobile Parts & Supplies	700
Columbia Farms	Greenville	Poultry Processing Plant	670
House Of Raeford Farms Inc	Greenville	Frozen Turkey	650
Honeywell Aerospace	Greer	Aircraft Equipment Parts & Supplies	600
Mitsubishi Polyester Film Inc	Greer	Unsupported Plastics Film & Sheet and Paper Packaging Materials	600
Reliance Electric Co	Greenville	Motor Vehicle Power Transmission Equipment and Electric Motors	600
Baldor Dodge Reliance	Greenville	Motors/Generators	570
Nutra Manufacturing Inc	Greenville	Vitamin Preparations	550
Drive Automotive Industries	Piedmont	Stamped Automotive Products, Motor Vehicles & Car Bodies, Motor Vehicle Parts & Accessories and Metal Stampings	500
Hubbell Lighting Inc	Greenville	Lighting Equipment	500
Safety Components	Greenville	Nonwoven Fabrics	400
Safety Components Fabric Techs	Greenville	Motor Vehicle Parts & Accessories	385
Bosch Rexroth Corp	Fountain Inn	Fluid Power Pumps, Motors Or Generators and Pumps & Pumping Equipment	380
Hartness International Inc	Greenville	Packaging Machinery	380
Delta Mills Inc	Fountain Inn	Broadwoven Cotton Fabric Mill	378
Baldor Dodge Reliance	Greenville	Speed Changers-Ind-Drives & Gears	368
Geschmay Corp	Greenville	Felt & Felt Products, Conveyors & Conveying Equipment and Machine Tools & Accessories	332
Hollingsworth, John D	Greenville	Textile Machinery	325
Ellcon-National Inc	Greenville	Railroad Equipment	305
Steel Heddle Inc	Greenville	Wire Heddles For Loom Harnesses	303
BBA Nonwovens Simpsonville Inc	Simpsonville	Nonwoven Fabric Mill	300
Judson Plant	Greenville	Yarn-Spinning Mills	300
Milliken & Co	Marietta	Broadwoven Wool Fabric Mill	300
Southwark Metal Manufacturing	Piedmont	Refrigeration & Heating Equipment and Heating Equipment & Supplies	300
Perrigo Co Of South Carolina	Greenville	Vitamin Preparations	275

CDS Ensembles Inc	Greer	Manmade Broadwoven Fabric Mill	270
Milliken & Co	Greenville	Broadwoven Cotton Fabric Mill	270
Fabri-Kal Corp	Piedmont	Plastic Cups and Sanitary Food Containers	265
T & S Brass & Bronze Works Inc	Travelers Rest	Plumbers' Brass Goods Including Drain Cocks, Faucets & Spigots	265
Cytec Carbon Fibers LLC	Piedmont	Carbon & Graphite Fibers	250
GTP Greenville Inc	Greenville	Textile Machinery	245
Engineered Specialty Textiles	Greenville	Broadwoven Cotton Fabric Mill	240
National Electrical Carbon	Greenville	Carbon & Graphite Products	225
U S Finishing	Greenville	Finishers Of Textiles	225
Teknor	Fountain Inn	Hose & Tubing-Rubber & Plastic	220
Berry Plastics Corp	Greenville	Polyethylene Film and Plastic Bags	200
C F Sauer Co	Mauldin	Mayonnaise & Salad Dressings	200
Covalence Plastics	Greenville	Plastics-Fabrics,Film, Etc	200
Greenville Metalcraft	Piedmont	Duct & Duct Fittings	200
Prettl International Inc	Greenville	Nonferrous Automotive Wire & Cable	200
Milliken & Co	Simpsonville	Broadwoven Wool Fabric Mill	185
Spaulding Lighting Inc	Greenville	Lighting Fixtures	180
Para-Chem Southern Inc	Simpsonville	Medicinal Chemicals	170
Precision Valve Corp	Travelers Rest	Metal Aerosol Valves	167
CMC South Carolina Steel	Taylors	Steel-Structural	165
Timken Co	Greenville	Roller Bearings & Parts	162
Caterpillar Inc	Fountain Inn	Construction Machinery and Internal Combustion Engines	160
Cliffstar Corp	Greer	Fruit Juices	160
Goglanian Bakeries Inc	Fountain Inn	Bread/Other Bakery Products Except Cookies	160
Southern Weaving Co	Greenville	Woven Webbing	152
Alfmeier Corp	Greenville	Motor Vehicle Fuel Systems & Parts	150
Amstar Foods Llc	Greenville	Prepared Pizza Dough	150
Century Plastics Inc	Simpsonville	Plastics-Molds	150

Engineered Products LLC	Greenville	Display Racks, Metal Flooring & Siding and Conveyors & Conveying Equipment	150
Executive Kitchens Inc	Simpsonville	Wooden Office Cabinets	150
Sara Lee Bakery Group Inc	Greenville	Frozen Bakery Products	150
South Carolina Steel Corp	Taylors	Steel Fabricator	145
Kyocera Mita South Carolina	Fountain Inn	Prepared Photographic Toners	140
Diversified Coating Systems	Greenville	Painting, Coating & Hot Dipping Services	135
Ethox Chemicals LLC	Greenville	Surface Active Agents	135
Mita South Carolina Inc	Fountain Inn	Photographic Equip & Supplies	129
B K I Industries	Simpsonville	Food Preparations	125
Delta Mills Inc	Fountain Inn	Cotton Broad Woven Goods	115
Wright Metal Products Inc	Simpsonville	Machine Shop, Jobbing & Repair Services	110
Fisher-Barton South Carolina	Fountain Inn	Metal Stamping	104
Atlas Food Systems & Svc Inc	Greenville	Frozen Food Processors	100
Carolina Commercial Heat Trtng	Fountain Inn	Heat Treating Metal	100
Cognis Corp	Mauldin	Cyclic Crudes & Intermediates, Industrial Organic Chemicals and Surface Active Agents	100
Cybertech Corp	Taylors	Adhesives & Sealants	100
Day International Group Inc	Mauldin	Rubber Or Rubberized Fabric Printers' Rolls & Blankets	100
Jtekt Automotive South	Piedmont	Motor Vehicle Transmission Housings Or Parts	100
Kent Manufacturing Co	Greenville	Yarn-Spinning Mills	100
Meridian Industries Inc	Travelers Rest	Dyeing Cotton Broadwoven Fabric	100
Michelin Aircraft Tire Co LLC	Greenville	Aircraft Tires	100
Reynolds Co	Greenville	Paste Adhesives	100
Standard Motor Products Inc	Greenville	Motor Vehicle Parts & Accessories	100
Trane Co	Greenville	Air Conditioning Equipment	100

Source: Dun & Bradstreet and infoUSA.

Appendix: Profiled Manufacturing Occupations

Title	Standard Occupa- tional Code	Median Wage	Employment	Reading Compre- hension	Active Listening	Writing	Speaking	Mathematics	Education	High Growth?	High Turnover?
Team Assemblers	512092	13.55	2,611	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate-term on-the-job training	Yes	Yes
Inspectors, Testers, Sorters, Samplers & Weighers	519061	13.21	1,074	Moderate	Moderate	Moderate	Moderate	Substantial	Moderate-term on-the-job training	No	Yes
Supervisors/ Managers of Production & Operating Workers	511011	28.20	1,011	Substantial	Substantial	Substantial	Substantial	Substantial	Work experience in a related occupation	No	Yes
Textile Knitting & Weaving Machine Setters, Operators & Tenders	516063	16.69	725	Moderate	Moderate	Low	Low	Moderate	Long-term on-the-job training	No	Yes
General Maintenance & Repair Workers	499042	15.30	718	Substantial	Substantial	Moderate	Moderate	Moderate	Moderate-term on-the-job training	Yes	No
Laborers & Freight, Stock & Material Movers (hand)	537062	10.90	663	Moderate	Moderate	Moderate	Low	Moderate	Short-term on-the-job training	Yes	Yes
Textile Winding, Twisting & Drawing Out Machine Setters, Operators & Tenders	516064	11.05	633	Moderate	Moderate	Low	Low	Moderate	Moderate-term on-the-job training	No	Yes

Title	Standard Occupational Code	Median Wage	Employment	Reading Comprehension	Active Listening	Writing	Speaking	Mathematics	Education	High Growth?	High Turnover?
Machinists	514041	15.98	584	Substantial	Substantial	Low	Moderate	Substantial	Long-term on-the-job training	Yes	No
Helpers--Production Workers	519198	9.34	510	Low	Low	Low	Low	Low	Short-term on-the-job training	Yes	Yes
Welders, Cutters, Solderers & Brazers	514121	17.94	493	Moderate	Moderate	Low	Moderate	Moderate	Long-term on-the-job training	Yes	No
Packaging & Filling Machine Operators & Tenders	519111	10.55	469	Moderate	Substantial	Moderate	Moderate	Low	Short-term on-the-job training	No	Yes
Industrial Machinery Mechanics	499041	18.92	454	Moderate	Moderate	Moderate	Moderate	Moderate	Long-term on-the-job training	Yes	No
Industrial Engineers	172112	31.99	451	High	Substantial	Substantial	Substantial	Substantial	Bachelor's degree	Yes	No
Industrial Truck & Tractor Operators	537051	12.40	448	Substantial	Substantial	Moderate	Moderate	Moderate	Short-term on-the-job training	No	Yes
Sewing Machine Operators	516031	19.26	361	Low	Low	Low	Low	Low	Moderate-term on-the-job training	No	Yes
Cutting, Punching & Press Machine Setters, Operators & Tenders, Metal & Plastic	514031	12.82	346	Moderate	Substantial	Moderate	Moderate	Moderate	Moderate-term on-the-job training	No	Yes
Packers & Packagers, Hand	537064	8.92	344	Moderate	Substantial	Low	Moderate	Moderate	Short-term on-the-job training	No	Yes

Title	Standard Occupational Code	Median Wage	Employment	Reading Comprehension	Active Listening	Writing	Speaking	Mathematics	Education	High Growth?	High Turnover?
General & Operations Managers	111021	35.92	344	Substantial	Substantial	Substantial	Substantial	Substantial	Bachelor's or higher degree, plus work experience	N/A	N/A
Molding, Coremaking & Casting Machine Setters, Operators & Tenders, Metal & Plastic	514072	13.99	335	Substantial	Moderate	Low	Moderate	Moderate	Moderate-term on-the-job training	No	Yes
Shipping, Receiving & Traffic Clerks	435071	12.63	332	Substantial	Substantial	Substantial	Substantial	Substantial	Short-term on-the-job training	Yes	No
Mixing & Blending Machine Setters, Operators & Tenders	519023	15.62	314	Moderate	Low	Low	Low	Moderate	Moderate-term on-the-job training	No	Yes
Grinding, Lapping, Polishing & Buffing Machine Tool Setters, Operators & Tenders, Metal & Plastic	514033	18.32	313	Moderate	Moderate	Low	Moderate	Substantial	Moderate-term on-the-job training	No	No
Textile Bleaching & Dyeing Machine Operators & Tenders	516061	13.66	292	Low	Moderate	Low	Low	Moderate	Moderate-term on-the-job training	No	Yes
Slaughterers & Meat Packers	513023	12.68	282	Low	Low	Low	Low	Low	Moderate-term on-the-job training	No	No

Title	Standard Occupational Code	Median Wage	Employment	Reading Comprehension	Active Listening	Writing	Speaking	Mathematics	Education	High Growth?	High Turnover?
Sales Representatives, Wholesale & Manufacturing (except technical & scientific products)	414012	26.86	275	Substantial	Substantial	Substantial	Substantial	Substantial	Moderate-term on-the-job training	Yes	No
Extruding & Drawing Machine Setters, Operators & Tenders, Metal & Plastic	514021	12.30	275	Moderate	Moderate	Moderate	Moderate	Substantial	Moderate-term on-the-job training	No	Yes
Computer-Controlled Machine Tool Operators, Metal & Plastic	514011	17.81	260	Moderate	Moderate	Low	Moderate	Substantial	Moderate-term on-the-job training	No	Yes
Assemblers & Fabricators	512099	13.92	257						Moderate-term on-the-job training	No	Yes
Mechanical Engineers	172141	36.87	234	High	Substantial	Substantial	Substantial	High	Bachelor's degree	No	Yes
Electrical & Electronic Equipment Assemblers	512022	15.02	230	Substantial	Substantial	Moderate	Substantial	Moderate	Short-term on-the-job training	No	Yes
Machine Feeders & Offbearers	537063	12.19	230	Low	Low	Low	Low	Low	Short-term on-the-job training	No	Yes
General Office Clerks	439061	11.88	212	Substantial	Substantial	Substantial	Moderate	Moderate	Short-term on-the-job training	Yes	No

Title	Standard Occupational Code	Median Wage	Employment	Reading Comprehension	Active Listening	Writing	Speaking	Mathematics	Education	High Growth?	High Turnover?
Meat, Poultry & Fish Cutters & Trimmers	513022	10.49	211	Moderate	Moderate	Low	Moderate	Low	Short-term on-the-job training	No	No
Production, Planning & Expediting Clerks	435061	18.33	209	Substantial	Substantial	Substantial	Moderate	Moderate	Short-term on-the-job training	No	Yes
Engine & Other Machine Assemblers	512031	16.61	207	Moderate	Low	Low	Low	Moderate	Short-term on-the-job training	No	No
Industrial Production Managers	113051	39.17	206	Substantial	Substantial	Substantial	Substantial	Substantial	Work experience in a related occupation	N/A	N/A
Tire Builders	519197	18.61	205	Low	Low	Low	Low	Low	Moderate-term on-the-job training	No	Yes
Extruding, Forming, Pressing & Compacting Machine Setters, Operators & Tenders	519041	13.46	202	Moderate	Low	Low	Low	Moderate	Moderate-term on-the-job training	No	Yes
Chemical Plant & System Operators	518091	25.67	186	Substantial	Substantial	Moderate	Substantial	Substantial	Long-term on-the-job training	No	Yes
Cutting & Slicing Machine Setters, Operators & Tenders	519032	14.97	185	Moderate	Low	Low	Low	Moderate	Moderate-term on-the-job training	No	Yes
Chemical Equipment Operators & Tenders	519011	18.59	183	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate-term on-the-job training	No	Yes

Title	Standard Occupational Code	Median Wage	Employment	Reading Comprehension	Active Listening	Writing	Speaking	Mathematics	Education	High Growth?	High Turnover?
Multiple Machine Tool Setters, Operators & Tenders, Metal & Plastic	514081	15.58	170	Substantial	Moderate	Moderate	Moderate	Moderate	Moderate-term on-the-job training	No	No
Stock Clerks & Order Fillers	435081	10.87	168	Substantial	Substantial	Moderate	Substantial	Moderate	Short-term on-the-job training	No	Yes
Executive Secretaries & Administrative Assistants	436011	17.60	168	Substantial	Substantial	Substantial	Substantial	Moderate	Moderate-term on-the-job training	Yes	No
Coating, Painting & Spraying Machine Setters, Operators & Tenders	519121	16.46	163	Low	Low	Low	Low	Moderate	Moderate-term on-the-job training	No	Yes
Bookkeeping, Accounting & Auditing Clerks	433031	15.37	162	Substantial	Substantial	Substantial	Moderate	Substantial	Moderate-term on-the-job training	Yes	No
Tool & Die Makers	514111	23.72	159	Substantial	Moderate	Moderate	Moderate	High	Long-term on-the-job training	No	Yes
Welding, Soldering & Brazing Machine Setters, Operators & Tenders	514122	24.42	152	Substantial	Moderate	Moderate	Moderate	Moderate	Moderate-term on-the-job training	Yes	No
Machinery Maintenance Workers	499043	17.95	151	Moderate	Moderate	Moderate	Moderate	Moderate	Short-term on-the-job training	No	Yes

Title	Standard Occupational Code	Median Wage	Employment	Reading Comprehension	Active Listening	Writing	Speaking	Mathematics	Education	High Growth?	High Turnover?
Customer Service Representatives	434051	14.25	151	Substantial	Substantial	Substantial	Substantial	Moderate	Moderate-term on-the-job training	Yes	No
Structural Metal Fabricators & Fitters	512041	16.07	150	Substantial	Substantial	Moderate	Substantial	Substantial	Moderate-term on-the-job training	No	No
Drilling & Boring Machine Tool Setters, Operators & Tenders, Metal & Plastic	514032	15.27	147	Moderate	Low	Low	Low	Moderate	Moderate-term on-the-job training	No	Yes
Electricians	472111	18.01	145	Substantial	Substantial	Moderate	Moderate	Substantial	Long-term on-the-job training	No	Yes
Purchasing Agents, Except Wholesale, Retail & Farm Products	131023	24.56	144	Substantial	Substantial	Substantial	Substantial	Substantial	Work experience in a related occupation	N/A	N/A
Sheet Metal Workers	472211	16.09	132	Substantial	Substantial	Substantial	Substantial	Substantial	Long-term on-the-job training	No	Yes
Accountants & Auditors	132011	22.33	131	Substantial	Substantial	Substantial	Substantial	Substantial	Bachelor's degree	N/A	No
Chemical Technicians	194031	20.32	124	Substantial	Substantial	Substantial	Moderate	Substantial	Associate degree	No	No
Electrical Engineers	172071	40.13	123	High	High	Substantial	Substantial	High	Bachelor's degree	No	No
Janitors & Cleaners (except maids & housekeeping cleaners)	372011	8.12	121	Substantial	Moderate	Moderate	Moderate	Moderate	Short-term on-the-job training	Yes	No

Title	Standard Occupational Code	Median Wage	Employment	Reading Comprehension	Active Listening	Writing	Speaking	Mathematics	Education	High Growth?	High Turnover?
Supervisors/Managers of Mechanics, Installers & Repairers	491011	24.11	118	Substantial	Substantial	Substantial	Substantial	Substantial	Work experience in a related occupation	No	No
Lathe & Turning Machine Tool Setters, Operators & Tenders, Metal & Plastic	514034	17.38	117	Moderate	Low	Low	Low	Moderate	Moderate-term on-the-job training	No	Yes
Industrial Engineering Technicians	173026	19.12	117	Substantial	Substantial	Substantial	Substantial	Substantial	Associate degree	No	No
Engineering Technicians (except drafters)	173029	38.39	115						Associate degree	No	Yes
Supervisors/Managers of Office & Administrative Support Workers	431011	20.14	112	Substantial	Substantial	Substantial	Substantial	Substantial	Work experience in a related occupation	Yes	No
Fiberglass Laminators and Fabricators	512091	42.56	109						Moderate-term on-the-job training	No	No
Engineering Managers	119041	45.83	106	High	High	Substantial	Substantial	High	Bachelor's or higher degree, plus work experience	N/A	N/A
Secretaries (except legal, medical & executive)	436014	13.97	103	Substantial	Substantial	Substantial	Substantial	Moderate	Moderate-term on-the-job training	Yes	No

Title	Standard Occupational Code	Median Wage	Employment	Reading Comprehension	Active Listening	Writing	Speaking	Mathematics	Education	High Growth?	High Turnover?
Carpenters	472031	18.86	95	Moderate	Substantial	Substantial	High	High	Long-term on-the-job training	Yes	No
Plating & Coating Machine Setters, Operators & Tenders, Metal & Plastic	514193	12.24	93	Moderate	Moderate	Moderate	Low	Moderate	Moderate-term on-the-job training	No	No
Rolling Machine Setters, Operators & Tenders, Metal & Plastic	514023	18.26	91	Substantial	Substantial	Moderate	Substantial	Substantial	Moderate-term on-the-job training	No	Yes

Occupations pay above the living wage of \$15.13 per hour.

Sources: Economic Modeling Specialists Inc., U.S. Department of Labor (O*Net) and S.C. Department of Commerce.



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